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Amendment To The Claims

1. (Currently amended) A cable network, comprising:

a data switching system in communication with a plurality of network elements, said data switching system being adapted to issue ranging requests to query said network elements from time to time, determine transmission time delays associated with each of said network elements based on responses to the ranging requests, ~~for status information~~ and to store responses to the ranging requests ~~the status information~~ in a database; and

a management system for managing network elements on the cable network, said management system being adapted to obtain network element status information from said database,

wherein ~~the data switching system queries said network elements by a ranging request,~~ and the status information indicating a status of said network elements is determined based on the responses ~~a response~~ by a network element to the ranging request.

2. (Original) The cable network of claim 1, wherein said management system is further adapted to manage said data switching system.

3. (Original) The network of claim 1, wherein said plurality of network elements are selected from the group consisting of cable modems, broadband telephony interfaces, and multimedia terminal adaptors.

4. (Original) The network of claim 1, wherein said plurality of network elements comprises a plurality of cable modems.

5. (Original) The network of claim 1, wherein said data switching system is adapted to route data from a plurality of cable modem users over a multiplexed network interface.

6. (Original) The network of claim 1, wherein said data switching system is a cable modem termination system.

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7. (Original) The network of claim 6, wherein said management system is an element management system.

8. (Original) The network of claim 7, wherein said element management system is adapted to perform a Lifetest procedure by obtaining network element status information from said database.

9. (Original) The network of claim 1, wherein said management system is an operations system which is further adapted to configure and manage said data switching system.

10. (Original) The network of claim 1, further comprising a plurality of data switching systems, each of which is in communication with a plurality of endpoint devices and is adapted to query the endpoint devices from time to time for status information and to store the status information in a database.

11. (Original) The network of claim 10, wherein said management system is adapted to configure and manage said plurality of data switching systems.

12. (Original) The network of claim 1, wherein said data switching system is adapted to query said network elements every t minutes, and wherein t is within the range of about 10 to about 30.

13. (Original) The network of claim 1, wherein the database is a DOCSIS radio frequency MIB.

14. (Previously Presented) The network of claim 1, wherein the data switching system assigns each network element a status selected from the group consisting of up, down or transitional.

15. (Currently amended) A cable network, comprising:

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a cable modem termination system in communication with a plurality of network elements selected from the group consisting of cable modems, broadband telephony interfaces, and multimedia terminal adaptors, said cable modem termination system being adapted to issue ranging requests to query said network elements from time to time and determine transmission time delays associated with each of said network elements based on responses to the ranging requests, ~~for status information~~ and to store responses to the ranging requests ~~the status information~~ in at least one file; and

an element management system in communication with said cable modem termination system, said element management system being adapted to obtain status information about said network elements from said at least one file,

wherein ~~the cable modem termination system queries said network elements by a ranging request, and the status information~~ indicating a status of said network elements is determined based on the responses ~~a response~~ by a network element to the ranging request.

16. (Original) The cable network of claim 15, wherein said at least one file is a database, and wherein said element management system is adapted to run a Lifetest procedure by obtaining network element status information from said database.

17. (Currently amended) A method for obtaining status information on network elements in a cable network, comprising the steps of:

providing a cable network comprising a data switching system in communication with a plurality of network elements;

providing a management system for managing the network elements on the cable network, the management system being in communication with the database;

providing a ranging request signal from the data switching system to each of the network elements of the plurality of network elements, and determining transmission time delays associated with each of said network elements based on responses to the ranging requests;

determining status information for each of the plurality of network elements based on a response from each of the plurality of network elements to the ranging request ~~communication~~ signal, respectively;

storing this status information in a database; and

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accessing the status information from the database by way of said management system.

18. (Original) The method of claim 17, wherein said plurality of network elements are selected from the group consisting of cable modems, broadband telephony interfaces, and multimedia terminal adaptors.

19. (Original) The method of claim 17, wherein said plurality of network elements comprises a plurality of cable modems.

20. (Original) The method of claim 17, wherein said data switching system is adapted to route data from a plurality of cable modem users over a multiplexed network interface.

21. (Original) The method of claim 17, wherein said data switching system is a cable modem termination system.

22. (Original) The method of claim 21, wherein said management system is an element management system.

23. (Original) The method of claim 22, wherein said element management system is adapted to perform a Lifetest procedure by obtaining network element status information from said database.

24. (Original) The method of claim 17, wherein the database is a DOCSIS radio frequency MIB.

25. (Original) The method of claim 17, wherein the management system is further adapted to manage the data switching system.

26. Cancelled.

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